



AI

Compilation, models and algorithms for the on-line optimization of problems dealing with preferences and/or uncertainties

Helene Fargier

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ANITI

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Université
de Toulouse

- ▶ Helene Fargier (IRIT)
 - Compilation, algorithmic decision theory, uncertainty
- ▶ Christian Artigues (LAAS)
 - Combinatorial optim., constraint/integer programming, scheduling
- ▶ Romain Guillaume (IRIT-UT2J)
 - Robust optimization, scheduling, supply chain planning
- ▶ Jerome Mengin (IRIT-UT3)
 - Compilation, learning, preferences
- ▶ Guillaume Poveda (Airbus)
 - Combinatorial optimisation, hybrid ML/optimisation
- ▶ Cedric Pralet (ONERA)
 - Operations research, planning, space applications
- ▶ Florent Teichteil-Koenigsbuch (Airbus)
 - Planning and scheduling, hybrid ML / search

- ▶ Nicolas Schmid (2 years post doc):
 - Realization of the SALADD compiler (CSP to tree of MDDs)
- ▶ Louis Riviere (Ph. D, 11 dec 2023):
 - Compact representations of solution sets for scheduling under uncertainty
- ▶ Trong-Hieu Tran (Ph. D, 13 dec 2023)
 - Hybrid optimization approaches for vehicle routing problems with profits
- ▶ Pierre Pomeret Coquot (Ph. D, 13 dec 2023)
 - Individual and strategic decision under uncertainty: an algebraic and formal approach

- ▶ Main publications:
 - AAMAS'21, AMAI, ECAI 2023 (KC for preference languages)
 - CP'22 (the SALADD compiler)
 - KR20, Types 21, Ecsqaru 21 and 23, IJAR, ITP23 (game theory)
 - Ecsqaru 2023 (decision theory)
 - Annals of Operation. Research., EJOR (scheduling under uncertainty)
 - Fuzz'IEEE 20, 21, IJAR 20, 23, EJOR, FSS 23 (robust optimization)
 - ICORES21, IJCAI-ECAI 2022, CP 23, CPAIOR 23 EJOR (hybrid methods for complex scheduling problems)
 - ICAPS 23 (solving scheduling problems with cp and graph neural nets)
- ▶ The SALADD compiler
- ▶ International autumn school (ACP – ANITI- GDR RO and IA)
- ▶ Collaborations ISG Tunis, Wroclaw University, ANU

Beyond KC@ANITI: the HEROIC ANITI chair: Hybridizing IEarning, seaRch and combinatorial Optimization for Industrial deCision-making